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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,726	08/21/2003	Joseph C. Mollendorf	19226/2181 (R-5766)	8224

7590

08/10/2005

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EXAMINER
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LONEY, DONALD J

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/645,726

**Applicant(s)**

MOLLENDORF ET AL.

**Examiner**

Donald Loney

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-68 is/are pending in the application.
- 4a) Of the above claim(s) 47-59 and 61-68 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-46 and 60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>05/03/04</u> . | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Group I in the reply filed on May 20, 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 18-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In both claims 18 and 20, last line, it is not understood what the particular language drawn to "both the first and second laminate layers" means. It already appears the claim recites a layer on both sides of the material. Clarification is kindly requested.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 7, 13 and 60 are rejected under 35 U.S.C. 102(e) as being anticipated by Heitz et al (6633004). The examiner notes that claim 60 needs to be put in independent form since it depends for a non-elected claim.

Heitz et al teaches a syntactic foam with aerogels therein. Microspheres are also in the foam. Refer to column 3, lines 2-12.

3. Claims 1-7, 9, 11-13, 18 and 60 are rejected under 35 U.S.C. 102(e) as being anticipated by Harison et al (6451231).

Harison et al teaches a syntactic foam layer 26 and face sheets 28,30 (for instant claim 18). The foam can contain silica (i.e. aerogel material as defines by the applicant in paragraph [0043]). Refer to figures 6 and 7 along with column 2, lines 45-55, column 4, lines 46-53 and column 5, lines 1-3.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 13, 46 and 60 are rejected under 35 U.S.C. 102(b) as being anticipated by Fidler et al (5569513).

Fidler et al discloses a pipe shaped syntactic foam containing aerogel. Refer to figures 1 and 2 along with column 4, lines 6-56.

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6. Claims 1, 2, 7, 9, 10, 13, 14, 46 and 60 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 99/57182.

WO 99/57182 discloses a pipe type article made of syntactic foam containing microspheres and amorphous silica. Refer to page 3, line 29 through page 5, line 27.

7. Claims 1-3, 7-10, 12, 18, 19, 44 and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by Jonnes et al (3660849).

Jones teaches a multilayered diving suit containing a syntactic foam (i.e. rubber with microspheres). The foam can also include silica (i.e. an aerogel material). Refer to figure 1 and 2 along with column 1, lines 56-66, column 2, lines 20-58, column 3, lines 60-65 and column 5, lines 1-5.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 8, 10, 14-17 and 19-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harrison et al.

Harrison et al teaches the invention substantially as recited except for the incisions in the surface of the layer, thickness thereof and properties thereof. See 35 USC 102 rejection above. Harrison et al does disclose that the surface can have corrugations or any surface pattern desired and can be of any thickness (column 3, lines 246-29).

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Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to Harrison et al to form incisions in the surface of the layer motivated by the fact Harrison teaches the surface can have any desired surface pattern. Harrison also teaches the thickness can be as desired for a particular application. The specific properties and adhesive in the claims would be obvious to one of ordinary skill in the art motivated by the fact one would want to conform the insulating characteristics to a particular application. Adhesive used to bond layers would be obvious to one of ordinary skill in the art since adhesive is used to attach components together.


10. The references cited in the IDS filed May 3, 2004 which have been crossed through have not been considered since they do not have dates as required by 37 CFR 1.98 (b)(5) in MPEP section 609.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald Loney whose telephone number is (571) 272-1493. The examiner can normally be reached on Mon, Tues, Thurs and Fri. 8AM-4PM, flex schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Donald Loney  
Primary Examiner  
Art Unit 1772

DJL:D.Loney  
08/07/05